

AIR FORCE PRESS CONFERENCE, JUNE 15, 1948

Statement by Dr. Hugh L. Dryden, Director of Aeronautical Research
National Advisory Committee for Aeronautics

The achievement of Captain Charles E. Yeager as the first man to attain sustained horizontal supersonic flight in a piloted aircraft brings to public attention the power of a new tool, the research airplane, in obtaining the basic aeronautical knowledge essential to the design of military aircraft of outstanding performance. The number of these special airplanes designed for research at high speed have been sponsored by the Air Force and the Navy as a result of suggestions from many sources formalized in a joint Air Force-Navy-NACA conference in March 1944. Responsibility for the design and construction of the XS-1 was assigned to the Bell Aircraft Company under Air Force sponsorship with the technical collaboration of the NACA. Two XS-1 aircraft have been completed and flown. The Air Force conducted an accelerated flight test program to attain the highest safe speed with NACA cooperating by giving technical advice, instrumenting the airplane, and analyzing the data obtained. This airplane has been flown faster than sound by Captain Yeager, Major Lundquist, and Captain Fitzgerald. The second airplane, assigned to NACA for basic research, has, subsequent to Captain Yeager's pioneering flights, also been flown faster than sound by NACA pilots Herbert H. Hoover and the late Howard Lilly in making more detailed measurements of stability, control, and aerodynamic loads throughout the speed range. The entire undertaking demonstrates the present effective cooperation of the military services, industry, and the NACA in establishing

and maintaining U. S. leadership in advanced aeronautical research.

The NACA has already extended to Captain Yeager its congratulations. At the meeting of the Executive Committee in January, the members discussed at some length the technical significance of the new information obtained as a result of Captain Yeager's flying of the XS-1, attaching great importance to the results obtained in advancing the speed frontier. As a measure of personal commendation the Committee adopted the following resolution:

“RESOLVED, That the Chairman be authorized to convey to Captain Yeager, the pilot of the XS-1 in the Muroc tests, an expression of the Committee's appreciation of his fine performance in advancing the frontier of aeronautical knowledge.”

It is not easy for us so close to the event to appraise correctly the significance of the dawn of the supersonic age. There is danger on the one hand of seeming to minimize the accomplishments of a pioneer who ventured where none had traveled before and on the other hand there is danger of arousing undue expectations on the part of the public as to the performance to be expected of tactical military aircraft. The XS-1 is a small research airplane, flown at high speed at high altitude where the air loads on the structure are small. Between it and tactically useful military aircraft of larger size flying at lower altitude where the air loads are much greater there remains much research and development on many difficult problems.